

CLAIMS

1. An insertion part (100) embodied as a back-flow preventer, which can be used in a gas line or a liquid line, the insertion part comprising a housing (2), and a displaceable sealing body arranged in an interior of the housing which can seal a flow opening of a feeder channel in a closed position, the insertion part (100) is provided with an annular lip shaped part (3) having an annular body (6) held inside the housing, and which in an area of the at least one flow opening has at least one sealing lip (14) as the sealing body that can be displaced by the fluid, with a free lip end region that contacts an opposing housing surface in a sealing manner in the closed position.
2. An insertion part (100) according to claim 1, wherein a housing core (10) is provided inside the housing, which limits a flow opening between the housing core and an interior circumference of the housing, and the annular body (6) of the lip shaped part (3) is held at the interior circumference of the housing and in the closed position, the free lip end region contacts the housing core (10) in a sealing manner.
3. An insertion part (1, 100) which can be inserted into a gas line or a liquid line, embodied as a flow regulator, the insertion part (1, 100) comprising a housing (2), and at least one throttle body or control body arranged in an interior of the housing which limits a control gap, depending on a flow pressure, between itself and an adjacent housing wall, the insertion part (1, 100) is provided with an annular lip shaped part (3) having an annular body (6) held inside the housing, and which has at least one control lip (9) as the throttle body or control body, and which is aligned with a free lip end region extending in a direction of an adjacent housing wall.
4. An insertion part (1, 100) according to claim 3, wherein the lip shaped part (3) is held with the annular body (6) thereof at an interior circumference of the housing and with the free lip end region of the control lip (9) being aligned in the direction of the adjacent housing wall of a housing core (10).

5. An insertion part according to claim 1, wherein the lip shaped part (3) is provided with at least one upstream control lip (9) and the sealing lip (14) is downstream from the control lip (9).
6. An insertion part according to claim 1, wherein the at least one control lip (9) is aligned with the free lip end region extending in an opposite direction to a flow direction (Pf1) of the fluid and limits an annular upstream opening space (11) between the control lip and the interior circumference of the housing.
7. An insertion part according to claim 4, wherein a regulating profiling is provided in the housing wall adjacent to the free lip end of the control lip (9), which comprises grooves or moldings (13) aligned in a flow direction (Pf1).
8. An insertion part according to claim 7, wherein the grooves or moldings (13) are embodied as flow channels open in a direction of a circumference of the housing core.
9. An insertion part according to claim 7, wherein the grooves or moldings (13) are preferably arranged evenly distributed over the circumference of the housing wall, and are ellipsoid, polygon shaped, arc shaped or similarly rounded.
10. An insertion part according to claim 1, wherein the sealing lip (14) is aligned with the free lip end region extending in a flow direction (Pf1).
11. An insertion part according to claim 2, wherein the housing wall has a core section free from grooves and moldings in the area impinged by the sealing lip (14).
12. An insertion part according to claim 1, wherein the lip shaped part (3) is made from an elastic rubber or plastic material.

13. An insertion part according to claim 3, wherein a reaction pressure and reaction behaviors of the control lip (9) is predetermined by a length, a thickness, or similar design and dimensions of the lip (9) and/or by material characteristics of the lip shaped part (3).

14. An insertion part according to claim 1, wherein the housing (2) of the insertion part (1, 100) comprises at least two parts and the annular lip shaped part (3) is held with the annular body (6) thereof between two adjacent ones of the housing parts (4, 5).

15. An insertion part according to claim 1, wherein the annular body (6) of the lip shaped part (3) comprises a housing part seal for the adjacent housing parts (4, 5).

16. An insertion part according to claim 1, wherein the at least one sealing lip (14) is provided at the annular body (6) one side of the lip shaped part (3) and a control lip (14) is arranged on an other side of the annular body (6), and the sealing and control lips (14, 9) are arranged in an area of an allocated flow opening and in an area of a control gap, respectively.

17. An insertion part according to claim 16, wherein one control lip (9) and one sealing lip (14) are each provided on opposite sides of the annular body (6) of a generally star shaped or x-shaped lip shaped part (3) and the lips (9, 14), provided on the opposite sides of the annular body (6), are each allocated to a control gap having at least one downstream flow opening.

18. An insertion part according to claim 1, wherein the annular body (6) of the lip shaped part (3) is fastened in a housing chamber located between upstream and downstream housing parts (4, 5) of the housing (2).

19. An insertion part according to claim 18, wherein the housing chamber (7) is configured in a closed fashion except for an annular gap and the annular gap is penetrated by a connecting part (8) of the lip shaped part (3), which connects the annular body (6) to the sealing lip (14).

20. An insertion part according to claim 18, wherein the housing parts (4, 5) adjacent to the lip shaped part (3) can be snapped together.

21. An insertion part according to claim 1, wherein a tapering or cone shaped housing core is connected to an upstream housing part (4) of the housing (2) via at least one radial connection bar (12).